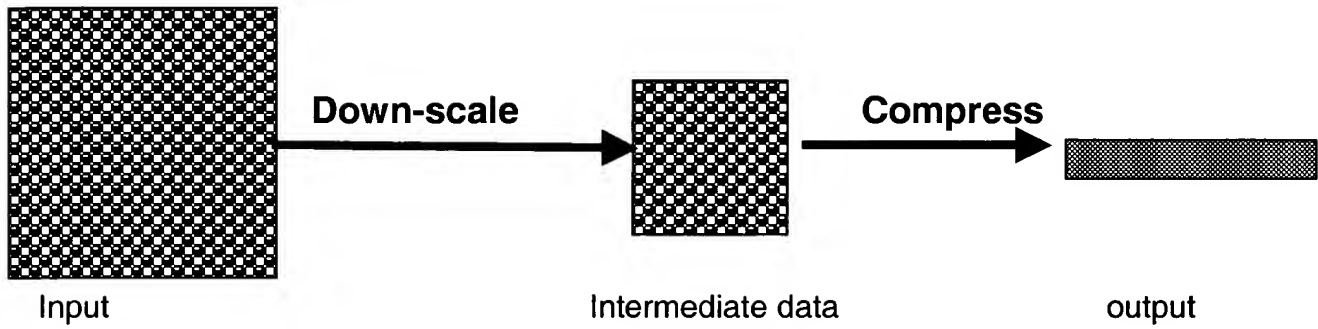


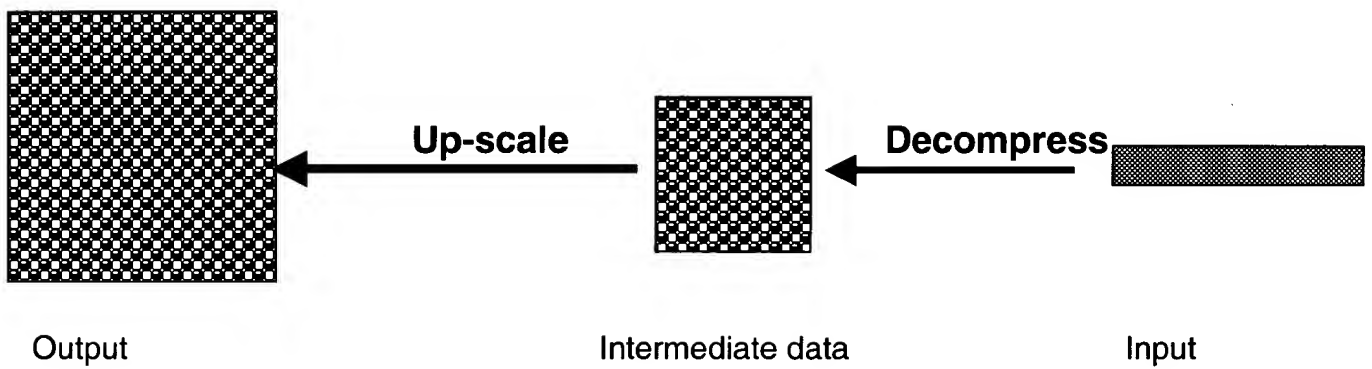
$M \times N$  image

$\frac{M}{2} \times \frac{N}{2}$  image

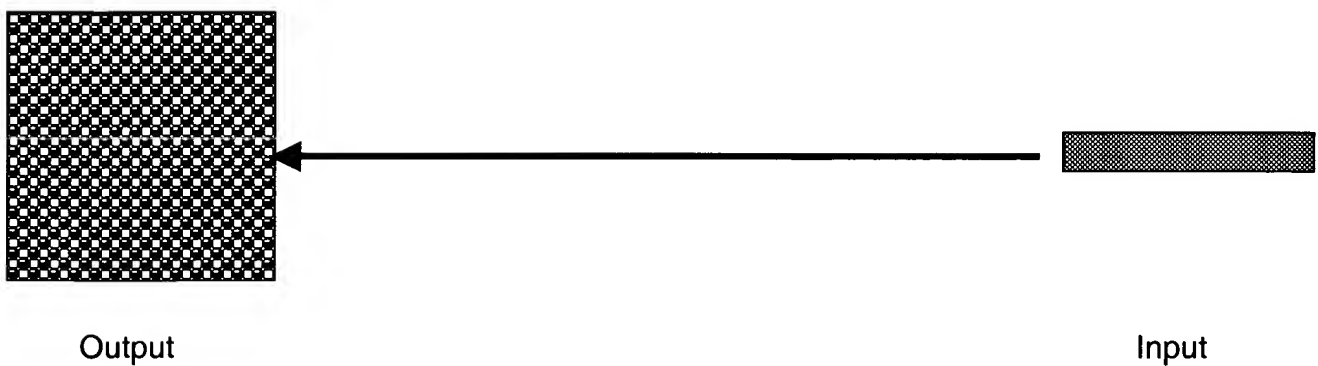
compressed data



**Figure 1**



**Figure 2**



**Figure 3**

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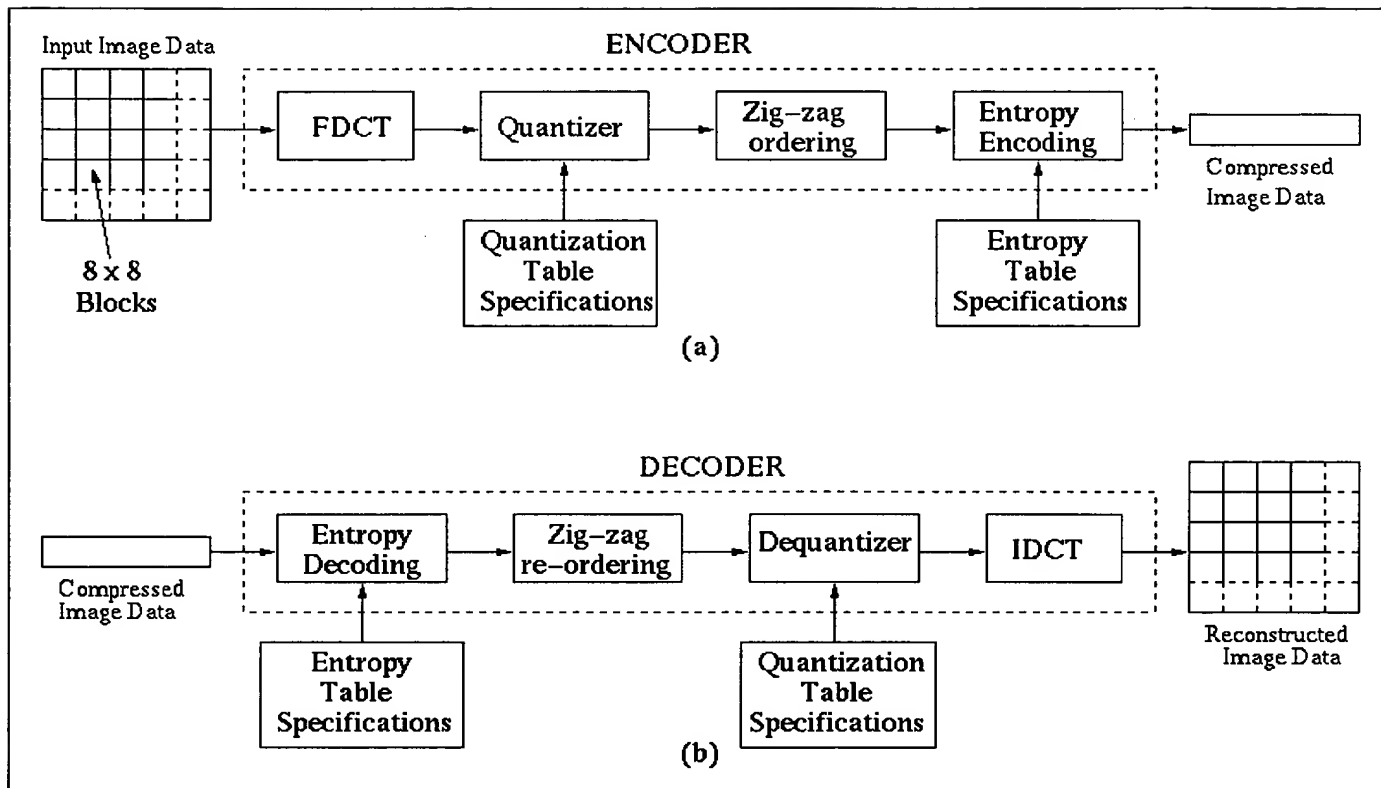


Figure 4

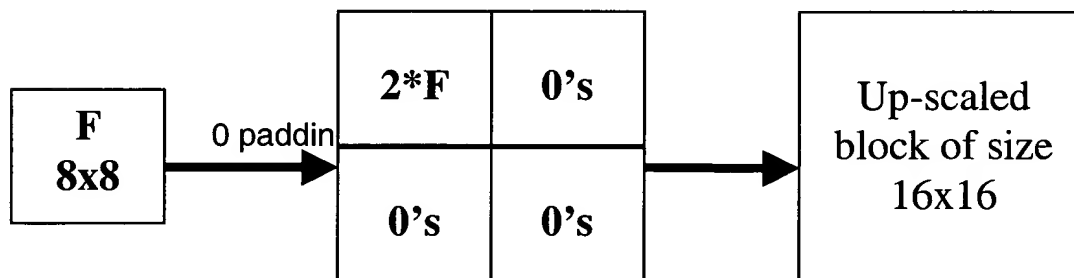


Figure 5

$$\begin{bmatrix} F(0,0) & F(0,1) & \dots & F(0,7) \\ F(1,0) & F(1,1) & \dots & F(1,7) \\ \vdots & \vdots & \ddots & \vdots \\ F(7,0) & F(7,1) & \dots & F(7,7) \end{bmatrix} \Rightarrow \begin{bmatrix} 1.25F(0,0) & 1.25F(0,1) & \dots & 1.25F(0,7) & 0 & 0 \\ 1.25F(1,0) & 1.25F(1,1) & \dots & 1.25F(1,7) & 0 & 0 \\ \vdots & \vdots & \ddots & \vdots & 0 & 0 \\ 1.25F(7,0) & 1.25F(7,1) & \dots & 1.25F(7,7) & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 \end{bmatrix}$$

Figure 6